

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018687**Date Inspected:** 21-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

**OBG Trial Assembly Area**

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

SMAW repair welding of several welds located inside PCMK OBG 11DE/11EE, side plate, north (crossbeam) side, holdback weld area. Welders were identified as 044504, 050289. QC was identified as ZPMC CWI An Qing Xiang (QC1). This QA Inspector observed the welders performing SMAW welding on T-rib to T-rib welds and I-rib to side plate welds. See photo below of I-rib to side plate repair welds. QC1 informed this QA Inspector that this welding was the result of ZPMC visual testing and QC could not provide weld numbers. Welding variables recorded by QC1 appeared to comply with WPS-345-SMAW-1G(1F)-FCM-repair-1, WPS-345-SMAW-2G(2F)-FCM-repair-1, WPS-345-SMAW-3G(3F)-FCM-repair-1 as verbally identified by QC1. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Cai Hai Zhou.

SMAW repair welding of weld joints OBW11C-007 located outside PCMK OBG 11DW/11EW, transverse joint, side plate, north (counterweight) side. Welder was identified as 040724. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Zhou Peng (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-345-SMAW-4G(4F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR17444 presented to

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this QA Inspector and verbally identified by QCA1. ZPMC Weld Repair Report B-WR17444 referred to ZPMC NDT Report UT-11W-073. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Cai Hai Zhou.

SMAW repair welding of weld joints OBW11C-008 located outside PCMK OBG 11DW/11EW, transverse joint, bottom plate. Welder was identified as 046709. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-345-SMAW-4G(4F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR17471 presented to this QA Inspector and verbally identified by QCA1. ZPMC Weld Repair Report B-CWR17471 referred to ZPMC NDT Report UT-11W-076. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Cai Hai Zhou.

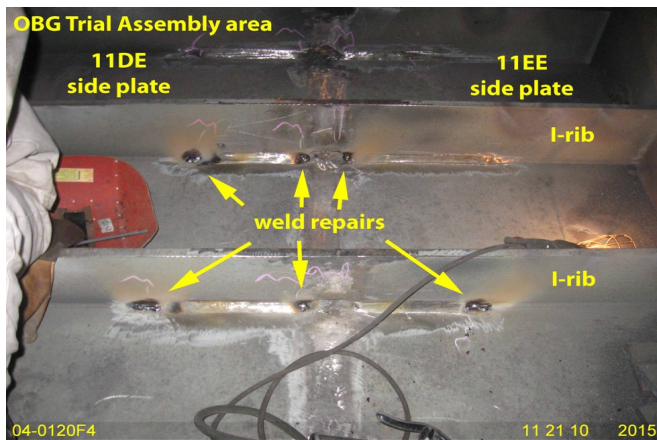
SMAW repair welding of base metal where temporary attachments had been removed located outside PCMK OBG 11DW, side plate to bottom plate area, north (counterweight) side. Welder was identified as 057333. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-345-SMAW-4G(4F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-CWR1842 presented to this QA Inspector and verbally identified by QC1. QC1 also informed this QA Inspector that the above noted repairs were in response to ZPMC visual testing. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Cai Hai Zhou.

### Heavy Dock

This QA Inspector randomly observed the following on the Heavy Dock:

All 4 towers, lift 4 were positioned on a base pedestal at end of the Heavy Dock. All four towers, lift 5 were positioned on top of the respective lift 4. No work was being performed on the Heavy Dock and no floating crane was in the area of the Heavy Dock.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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### Summary of Conversations:

As noted above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet, George	Quality Assurance Inspector
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<b>Reviewed By:</b>	Carreon, Albert	QA Reviewer
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